



Mobile network operators working together to serve the industry by providing independent evaluation of mobile devices for more than 20 years.



BENEFITS OF PARTICIPATION

OPERATORS

*Why should **operators** join the PTCRB?*

PTCRB was created by operators to establish a third-party certification, providing assurance that the certified device meets a minimum set of requirements established by the members. This gives confidence to the operator that their roaming partner's device will not cause harm to their network.

Small operators find benefit in PTCRB in that many do not have the resources to conduct testing in a lab of their own. PTCRB also gives the smaller operator a voice in the industry to have features/ functions introduced into the industry, when they might not have that voice on their own.

MANUFACTURERS

*Why should **manufacturers** obtain PTCRB certification?*

Full Operator members, whether active or passive, require all devices to be PTCRB certified. Obtaining PTCRB certification may accelerate the PTCRB operator approval process, and most likely assure access to a PTCRB operator's network.

THE ROLE OF CTIA

PTCRB has appointed CTIA as the administrator for the PTCRB certification process and PTCRB-issued IMEI's.

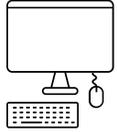
TYPES OF DEVICES THAT PTCRB CERTIFIES:

PTCRB certifies mobile devices including smartphones, laptops, and IoT product categories such as wearables, routers, payment systems, meter readers, automotive navigation systems, GPS telematics, and more.

PTCRB ENSURES COMPLIANCE WITH GLOBAL MOBILE COMMUNICATIONS STANDARDS, INCLUDING 3GPP.

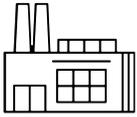
CERTIFICATION PROCESS FOR MOBILE DEVICES

1



Manufacturer submits a request for certification via the certification database – located on the PTCRB website.

2



Manufacturer selects a primary lab.

3



Primary lab determines testing required for device based upon individual device capabilities.

4



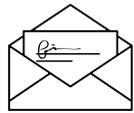
Primary lab submits the required documentation to the certification database upon completion of testing.

5



Manufacturer submits the necessary documentation required to the PTCRB certification database.

6



Manufacturer makes payment for certification to CTIA, the certification program administrator.

7



CTIA ensures all requirements have been met.

8



PTCRB certification notice is sent to the manufacturer.

MODULES & INTEGRATED DEVICES

CERTIFICATION FOR MODULES

“Modules” are fully tested and certified, similar to the certification procedure for mobile devices. They follow the PTCRB certification process and receive their own designated PTCRB certification. Modules are not cellular devices or end products that can connect to an operator network by themselves. Modules could integrate an antenna, power conditioning circuitry, a controlling micro and contain embedded SIMs. Narrowband modules targeted for IoT applications are more likely to include some or all of these components to simplify designs. PTCRB certification is available for testing and validating radio and protocol conformance. Modules hold a special certification designation within PTCRB.

CERTIFICATION FOR INTEGRATED DEVICES

To speed time-to-market and to save on development and testing costs, device manufacturers and integrators can build their product using a PTCRB-certified module. Devices that incorporate PTCRB-certified modules are called “Integrated Devices,” and have the benefit of already having had the vast majority of test cases completed when the module was certified. The only testing required is typically limited to interfaces such as the SIM, power, and antenna. Manufacturers who integrate a PTCRB-certified module in their device follow the same step-by-step process as other devices, with the exception that the integrator shall indicate which certified module they are using when submitting their certification request.

